

**Applicant:** Nelson et al.  
**Application No.:** 09/778,474

**REMARKS/ARGUMENTS**

After the foregoing Amendment, claims 1, 7, 11, 14-15, and 30-42 are currently pending in this application. Claims 2-6, 8-10, 12-13, 16-29 are canceled. Claims 1, 7, 11, and 14-15 are currently amended. Claims 30-42 are new.

**Claim Rejection - 35 U.S.C. §112**

Claim 5 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claim 5 is canceled. Applicants respectfully request withdrawal of this rejection.

**Claim Rejections - 35 U.S.C. § 103**

Claims 25-27 and 29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 3,742,498 to Dunn in view of U.S. Patent No. 4,462,806 to Hewitt et al. (hereafter Hewitt). Applicants respectfully disagree.

The combination of Dunn and Hewitt fail to teach or fairly suggest assigning a plurality of pseudorandom noise (PN) codes to a field unit, and transmitting an indication of the assigned PN codes to the field unit, as is presently claimed in varying forms in independent claims 1, 30, 34, and 38. Further, the field unit transmits, and the base station receives, one of the assigned PN codes which is then used to determine a timing adjustment required for the field unit.

These limitations were claimed in now canceled claim 17, which the Examiner rejected in view of Dunn column 5, lines 51-52, and column 6, lines 5-13. The first relied upon portion of Dunn discloses the following:

Each of the aircraft then transmits a different pseudo noise code ranging signal which in the first and second copending applications were received back at the corresponding aircraft from the repeater carried in satellite 42. However, in accordance with the present invention these ranging signals are transmitted from each of the aircrafts through the repeater carried by satellite 42 and received at the master station 40. (See Dunn, column 5, lines 51-59, *emphasis added.*)

The phase or timing information contained at the ground station, as derived from the pseudo noise code ranging signal, is transmitted as will be explained hereinbelow through the repeater satellite 42 to the particular one of the aircraft 41-41N to enable the adjustment of the transmit timer contained in the aircraft to assure that the transmission bursts from that particular aircraft occur in the proper time slot of the TDM frame format. (See Dunn, column 6, lines 5-13, *emphasis added.*)

These portions of Dunn teach that an aircraft transmits its own pseudo noise code ranging signal, and that this code is different between aircraft. Dunn does not teach assigning a plurality of PN codes to a field unit, transmitting an indication of the assigned codes to the field unit, and then receiving one of the PN codes from the field unit, as presently claimed. As is seen from the following section of Dunn detailing the structural elements, each aircraft is hardcoded with its unique pseudo-noise ranging code and therefore not capable of selectively transmitting one of a plurality of assigned PN codes:

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Transmit timer 44 then activates the pseudo-noise ranging signal generator 66 to produce its particular pseudo-noise ranging signal for application to the IF carrier and sub-carrier sources and modulators 67 for application to the RF portion of the aircraft transponder. (See *Dunn, Column 1, lines 16-21, emphasis added.*)

Hewitt was cited by the Examiner as teaching two communication channels to support messages to and from a base station, which the Examiner admits is not taught by Dunn (*see March 17, 2008 Office Action, page 3*). Applicants agree with the Examiner that Hewitt fails to teach two communication channels to support messages to and from a base station and further submits that Hewitt is completely silent regarding assigning a plurality of pseudorandom noise (PN) codes to a field unit, and transmitting an indication of the assigned PN codes to the field unit. Moreover, Hewitt is also completely silent regarding a field unit transmitting, and the base station receiving, one of the assigned PN codes which is then used to determine a timing adjustment required for the field unit.

For the reasons presented above, Applicants submit that Dunn and Hewitt, alone or in combination, fail to render the presently pending independent claims 1, 30, 34, and 38 obvious. Claims 2-4, 7-8, 10-11, and 14-15 depend upon claim 1, claims 31-33 depend upon claim 30, claims 35-37 depend upon claim 34, and claims 39-42 depend upon claim 38. Withdrawal of this 35 U.S.C. §103 rejection is respectfully requested.

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**Conclusion**

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

Nelson et al.

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